SB 1612

LINDA LINGLE GOVERNOR

JAMES R. AIONA, JR.



KURT KAWAFUCHI DIRECTOR OF TAXATION

SANDRA L. YAHIRO

STATE OF HAWAII DEPARTMENT OF TAXATION P.O. BOX 259 HONOLULU, HAWAII 96809

PHONE NO: (808) 587-1510 FAX NO: (808) 587-1560

SENATE COMMITTEES ON ENERGY AND ENVIRONMENT AND TRANSPORTATION, INTERNATIONAL & INTERGOVERNMENTAL AFFAIRS TESTIMONY REGARDING SB 1612 RELATING TO TRANSPORTATION ENERGY

TESTIFIER: KURT KAWAFUCHI, DIRECTOR OF TAXATION (OR DESIGNEE)

DATE:

FEBRUARY 12, 2009

TIME:

2:50PM

ROOM:

225

This bill establishes, among other things, various tax incentives for the encouragement of comprehensive alternative energy transportation solutions for Hawaii.

The Department of Taxation (Department) <u>supports the intent</u> of this measure; however <u>prefers SB 872</u>.

SUPPORT FOR ALTERNATIVE ENERGY—The Department strongly supports the encouragement and implementation of alternative energy systems in Hawaii in order to lessen the State's dependence on fossil fuels. As fossil fuel and petroleum prices become more volatile, encouraging Hawaii residents to use electric or alternative fuel vehicles could make the State less reliant on fossil fuel.

PREFERENCE FOR ADMINISTRATION'S BILL—The Department prefers the tax incentives contained in SB 872, which includes a general excise tax exemption for the sale or lease of alternative fuel vehicles, an income tax credit for facilities using biofuels, a rental motor vehicle surcharge tax exemption for alternative fuel vehicles, an income tax credit for electric vehicle charging infrastructure acquisition and installation, and an income tax credit for alternative fuel vehicle refueling infrastructure acquisition and installation. The Administration's measure has been factored into the biennium budget and the financial plan.

PROVIDING INCENTIVES TO ASSIST WITH LAYING THE FOUNDATION OF AN ALTERNATIVE ENERGY TRANSPORTATION INFRASTRUCTURE—The Department supports this measure's purpose of establishing the necessary infrastructure upon which the renewable energy technologies in transportation will be able to rely. As history suggests, many novel technology advances stumble to become commercially viable without the necessary framework to make the technologies feasible. This legislation is a step in the right direction toward

Department of Taxation Testimony SB 1612 February 12, 2009 Page 2 of 2

making alternative fuel transportation alternatives realistic.

REVENUE IMPACT—This measure will result in the following revenue losses:

- \$1.1 million in FY10,
- \$2.6 million in FY11,
- \$4.4 million in FY12,
- \$7.7 million in FY13,
- \$7.9 million in FY14, and
- \$8.1 million in FY15.



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION 869 PUNCHBOWL STREET HONOLULU, HAWAII 96813-5097

February 12, 2009

BRENNON T. MORIOKA

Deputy Directors MICHAEL D. FORMBY FRANCIS PAUL KEENO BRIAN H. SEKIGUCHI JIRO A. SUMADA

IN REPLY REFER TO:

TESTIMONY OF THE DEPARTMENT OF TRANSPORTATION

COMMITTEE ON ENERGY & ENVIRONMENT

COMMITTEE ON TRANSPORTATION, INTERNATIONAL & INTERGOVERNMENTAL AFFAIRS

SENATE BILL NO. 1612, RELATING TO TRANSPORTATION ENERGY.

The Department of Transportation (DOT) **supports** the intent of this bill, which proposes a comprehensive approach to increasing the use of alternative fuel vehicles. In addition, this bill addresses many of the same concerns as Senate Bill No. 872, which is the Administration's Transportation Energy Initiative. Accordingly, the DOT respectfully requests that this bill (Senate Bill No. 1612) be held in committee and that the Administration's Initiative, Senate Bill No. 872, be considered for passage in its place.

The DOT would also like to express the following concerns.

1. Between January 1, 2010 and December 31, 2015, Section 12 of this bill will exempt up to 200 alternative fuel, light-duty motor vehicles per rental car fleet from the rental motor vehicle surcharge tax. It will also waive the motor vehicle registration fees for electric vehicles, including any fees associated with the issuance of the electric vehicle license plates. These exemptions and waivers will result in a reduction in the State Highway Fund revenues.

The rental /tour vehicle surcharge tax and the motor vehicle registration fees represent 23% and 10%, respectively, of the State Highway Fund's total revenues. Given the DOT's current and projected financial situations, the DOT has been looking for new ways to generate revenues just so we can keep up with our project schedules. Any significant reduction to the State Highway Fund would severely compromise our ability to maintain these schedules.

2. Section 21 would require that state-wide and county-wide long-range land transportation plans include "transportation energy demand estimates." This requirement would place additional and unnecessary burdens on the DOT. The DOT's long-range land transportation plans focus only on accommodating projected traffic volumes on State highway facilities. A significant volume of our traffic, however, travels on other roadways (i.e., non-State highways). This significant volume is not factored into the DOT's travel demand forecasts. Thus, the DOT will not produce an appropriate estimate of the total future energy demand, as expected by this bill.

Thank you for the opportunity to testify on this bill.



DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
DEPUTY DIRECTOR

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Statement of THEODORE E. LIU

Director

Department of Business, Economic Development, and Tourism before the

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT AND THE

SENATE COMMITTEE ON TRANSPORTATION, INTERNATIONAL AND INTERGOVERNMENTAL AFFAIRS

Thursday, February 12, 2009 2:50 PM State Capitol, Conference Room 225

in consideration of SB 1612
RELATING TO TRANSPORTATION ENERGY.

Chairs Gabbard and English and Members of the Committees.

The Department of Business, Economic Development, and Tourism (DBEDT) strongly supports SB 1612, which provides a comprehensive set of measures to begin the transformation of Hawaii's transportation sector from almost completely dependent on petroleum towards the use of efficient, stable, secure, renewable, non-petroleum energy sources. We have some modifications to suggest to sections 13, 14, 18, and 19.

Energy is absolutely essential to the functioning of Hawaii's transportation systems. Planning must begin now to ensure adequate supplies to meet the energy demands of the transportation sector, while enhancing Hawaii's economy and protecting our environment. The current reprieve in fuel prices provides us with an opportunity to begin a gradual, reasoned approach to transformation of our transportation energy sources. Waiting for the next crisis before taking action will reduce our options and increase our costs.

There are many ideas presented in SB1612. But its comprehensive and coordinated approach is one of its strengths.

Measures included in SB1612 include the establishment of:

- (1) Transportation energy **infrastructure** capable of supporting vehicles using alternative transportation energy sources, including electricity and biofuels;
- (2) **Vehicle incentives**, to accelerate transformation of the vehicle fleet to one that is capable of using non-petroleum energy sources;
- (3) Requirements for transportation energy diversification; and
- (4) **Data collection**, plans and analysis.

The task before us **IS** daunting: to transform our transportation system to be energy-diverse and resilient in the face of petroleum price spikes, supply concerns, economic turmoil, and environmental threats. But it is also a huge opportunity for Hawaii, especially now.

Take, for example, electric vehicles.

With today's advanced batteries, electronics, and control systems, electric vehicles are now technologically ready to make their entrance into our transportation system. Hawaii is a natural fit for the early adoption of these vehicles:

- As an island economy, Hawaii residents drive short daily distances, easing the challenges of adoption of all-electric vehicles.
- Hawaii's well-defined boundaries enable efficient deployment and monitoring of vehicle charging infrastructure.
- Hawaii's mild climate enhances vehicle battery performance and longevity.
- Electric vehicles enhance, and are enhanced by, Hawaii's "clean and green" image.

Electric vehicles could also provide several important benefits to Hawaii:

• Several of Hawaii's major potential renewable energy sources (wind, geothermal, wave, OTEC) are available at night and during non-peak hours. Electric vehicles, together with smart grid management, will

- enable this renewable electricity, which otherwise might be curtailed (i.e. go to waste), to be used in the transportation sector.
- Vehicle use of otherwise unused renewable energy has the potential to create a significant demand-pull for renewable energy generation.
- Eventually, inclusion of large-scale grid-connected electric vehicles with grid-to-battery and battery-to-grid capabilities could provide distributed storage and enhance grid stability.

As a small market, however, timing is important. With an energetic and sincere effort, NOW, to attract electric vehicle manufacturers to Hawaii, we can become a showcase for these vehicles, while enjoying the economic benefits -- and worldwide publicity -- provided by these high-tech, fun, attention-getting vehicles.

If we wait until the rest of the world is doing it, we will have missed this opportunity.

Already, GM has announced that they will have their Volt in San Francisco and Washington, DC.

Newark, Delaware, testing vehicle-to-grid technology. Other cities¹ and states are developing incentive packages. However, I repeat, Hawaii is a natural fit for electric vehicles and a small, well-designed program to be ahead of the wave could be extremely effective, with the investment far outweighed by the benefit: 1. achieving very important energy system improvements;

2. strengthening our innovation economy; and 3. benefiting tourism through national and international exposure.

We need to begin with the electric vehicle program now, but that does not mean that is all we need to do. Vehicle technologies take a while from initial introduction through availability in all new vehicles. After that, it takes a while for the old vehicles to be retired. So, a transition will take about 20-30 years. During this period, liquid fuels will be needed for internal combustion engine light duty vehicles. And beyond that point, liquid fuels will still be needed for aviation, freight transport, and dispatchable power generation.

The overall objective is a transition away from petroleum.

¹ Austin, TX; London, England;

Attached to our testimony is an outline of the overall objective and how the various parts of SB1612 contribute to the comprehensive approach needed.

Clear policy signals are needed to move the transportation sector -- particularly light duty vehicles -- away from petroleum.

Petroleum demand is reduced through efficiency (better fuel economy) and diversification (vehicles capable of operating on something other than petroleum: electricity, E85, biodiesel, hydrogen, or other alternative fuels). The market will be able to meet the objective with a mix of vehicle technologies and energy sources. That mix may change over time.

Although the technologies may change over time, the policy signal – reduce dependence on petroleum – should be clear and consistent.

The comprehensive set of measures presented in SB1612 could begin an effective transition away from petroleum dependence and towards renewable and indigenous energy sources.

Section 1 requires electric vehicle charging for new homes built after 2015.

Section 2 designates parking for electric vehicles. This is an important first step. Eventually, electric vehicles will be plugged in while parked, and electric vehicle drivers will need to be able to find grid-connected parking spots through communications with the network operations center. Therefore, it's important that electric vehicle parking is reserved for electric vehicles.

Section 3 enables electric vehicle networks to be established without being subject to regulation as a utility.

Sections 4-6 establish a grant fund to encourage early adoption of electric vehicles and to attract electric vehicle suppliers to Hawaii. The importance of this was described earlier.

Section 7 provides a tax credit to offset a portion of the cost of establishing electric vehicle charging and alternative fuel refueling. Providing incentives encourages the pioneers in this area to make the investments, take the risks, and provide the initial market pull that will

allow this industry to develop; contractors, electricians, and installers to be trained; and inspectors and others to become knowledgeable about these systems. Establishment of re-fueling and recharging sites is essential to support the early adoption of these vehicles and build public interest and confidence in alternatives to petroleum.

The tax credits for electric vehicle charge points proposed in this bill are up to 70% of the installed cost of each charge point or up to \$500 per charge point, whichever is less. Costs are site specific and will be influenced by the electrical service to the location, cable distance, and specific requirements of the vehicle charging technology. This proposal is estimated to cost about \$650,000 for the biennium. If either the vehicles or the market for the vehicles fail to materialize, the state will NOT have incurred any expense. If the vehicles and the market do materialize, these incentives will contribute greatly to the development of Hawaii's transportation energy diversification and to Hawaii's energy security.

We estimate that the income tax credits for alternative fuel refueling sites will cost about \$70,000 over the biennium if a total of seven E85, B20, and electric vehicle refueling stations are installed and the maximum level of \$10,000 is claimed for each, beginning July 1, 2009. The definitions in this section are consistent with the Federal definitions. This will invite investment in our infrastructure from out of state, and provide local employment for the installation of these new technologies.

Section 8 allows fuel economy leader vehicles and alternative fuel vehicles, which includes electric vehicles and plug-in hybrid electric vehicles, to be exempt from the General Excise Tax on retail sales.

Section 9 updates the energy objectives to be consistent with the maturation of energy technologies and to require the longer term perspective needed to achieve the best energy, economic, and environmental outcomes for the people of Hawaii.

Section 10 expands the applicability of the ethanol facility tax credit to other biofuels, i.e. biodiesel. This change will not have any revenue impact, since the overall state tax credit cap is

not changed. We do not expect that this tax credit will be taken in the coming year, since potential producers are required to file notices of intent to construct before they begin construction, and we do not have any active notices at this time.

Section 11 is in support of section 8.

Section 12 allows approximately 1000 rental car vehicles to be exempt from the motor vehicle surcharge, if the vehicles are alternative fuel vehicles. Using 300 rental days per year, the value to the rental car fleets would be about \$900,000 per year.

Section 13 allows electric vehicles to be exempt from registration fees. This would be a repeat of the exemption provided to electric vehicles between 1997 and 2002. We recommend that this section be revised to only affect the State portion of vehicle registration fees.

The first part of Section 14 (beginning on page 41) requires large private fleets to gradually increase their fleets' ability to operate on alternative fuels, beginning in 2012 with a requirement that four percent of new vehicles acquired be capable of operating on an alternative fuel, which includes alcohol fuels, biodiesel, electricity, propane, hydrogen, and other fuels included in the Federal definition. We support this section, if it is modified so that the requirement will begin in the year 2015.

The second part of Section 14 (beginning on page 44) requires vehicle dealers to offer an increasing percentage of alternative fuel vehicles for sale, beginning in 2015. We recommend that this section be deleted.

Section 15 instructs State fleets to lead by example, choosing the vehicle technologies that would benefit the most, at this point, from inclusion in State fleets. It does allow fleets to select vehicles that "meet the needs of the fleet," including costs, so is not projected to have a revenue impact in the short term. In the longer term, this will diversify the fuel needs of State government fleets.

Section 16 establishes a biofuel preference for State government fuel purchases.

Section 17 clarifies vehicle data collection requirements for State government fleets.

Section 18 provides for enforcement of the vehicle dealer requirements in section 14; we recommend that this section be deleted.

Section 19 requires the Department of Accounting and General Services to develop a plan for electric vehicle charging stations at State-owned parking facilities ... and to provide a report to the Legislature by the end of 2009. We do not expect that six months will be adequate for the project; we recommend that the deadline be removed.

Sections 20 and 22 provide us with data needed to track progress.

Section 21 incorporates an element of energy planning into the transportation planning process. As we saw with last year's price spike, mode choice and vehicle use are both affected by energy prices; likewise, energy demand is affected by changes in the transportation system.

I'll finish with what I said at the beginning: energy is absolutely essential to the functioning of Hawaii's transportation systems. We need to start moving in this direction now; the provisions in this bill offer a comprehensive approach that will be an effective first step.

I encourage your support of this bill.

Thank you for the opportunity to offer these comments.

LINDA LINGLE

AARON S. FUJIOKA



PROCUREMENT POLICY BOARD

UREMENT POLICY B DARRYL W. BARDUSCH LESLIE S. CHINEN DARYLE ANN HO KEITH T. MATSUMOTO RUSS K. SAITO PAMELA A. TORRES

STATE OF HAWAII STATE PROCUREMENT OFFICE

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TESTIMONY OF AARON S. FUJIOKA **ADMINISTRATOR** STATE PROCUREMENT OFFICE

TO THE SENATE COMMITTEES ON **ENERGY AND ENVIRONMENT** AND TRANSPORTATION, INTERNATIONAL AND INTERGOVERNMENTAL AFFAIRS

February 12, 2009

2:50 PM

SB 1612

RELATING TO TRANSPORTATION ENERGY

Chair Gabbard, Chair English and committee members, thank you for the opportunity to testify on SB 1612.

The State Procurement Office (SPO) opposes the amendment to SECTION 4, which proposes to exempt from HRS chapter 103D, disbursements from the transportation energy transformation grant fund.

Statutory exemptions are contrary to the Hawaii Public Procurement Code (Code), section 103D-102, HRS, on the applicability of the chapter that states in part "... shall apply to all procurement contracts made by governmental bodies whether the consideration for the contract is cash, revenues, realizations, receipts, or earnings, . . ." Any governmental agency with the authority to expend funds should be in compliance with chapter 103D, which promotes the policy of fair and equitable treatment of all persons who deal with the procurement system; fosters effective broadbased competition; and increases public confidence in public procurement.

SB 1612 February 12, 2009 2:50 PM Page 2 of 2

The SPO is against statutorily exempting specific items from the Code, as it is not in the best interest of government, the business community, and the general public. The Code establishes a time-tested, fair, and reliable set of rules and processes for award of contracts. The competitive procurement processes of the Code are to insure that all potential providers are afforded the opportunity to compete for the required services. To the extent agencies may need specific purchases to be exempted from Code requirements, the Code provides an exemption process.

The Code should not be viewed as an obstacle to a purchasing agency's mission, but rather as the single source of public procurement policy to be applied equally and uniformly. It was the legislature's intent for the Code to be a single source of public procurement policy. If individual agencies are exempted and allowed to develop their own individual processes, it becomes problematic and confusing to vendors, contractors and service providers that must comply with a variety of different processes and standards. Fairness, open competition, a level playing field, and government disclosure and transparency in the procurement and contracting process are vital to good government. For this to be accomplished, we must participate in the process with one set of statutes and rules.

The SPO recommends amending page 9, lines 12-13, as follows:

"...chapter. Disbursements from the transportation energy transformation grant fund shall not be subject to chapter 42F or 103D."

For clarification purposes only, the SPO submits written comments on SECTION 16. The bill proposes to change the biofuel preference from 'biodiesel' to 'biomass-based diesel', however it is not clear as to which fuel (biodiesel or diesel fuel substitute produced from biomass) is given a preference since both fuel types are mentioned in the definition of biomass-based diesel. The SPO recommends amendments to page 53, lines 15 to 20, as follows:

"(f) As used in this section, "biomass-based diesel" means biodiesel or diesel fuel substitute produced in Hawaii from biomass, provided that the fuel is produced in Hawaii and registered with the Environmental Protection Agency for use in on-road engines and meets ASTM International fuel specifications for use in diesel engines."

Thank you.

TAXBILLSERVICE

126 Queen Street, Suite 304

TAX FOUNDATION OF HAWAII

Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT:

INCOME, GENERAL EXCISE, USE, RENTAL MOTOR VEHICLE AND TOUR

VEHICLE SURCHARGE, Transportation energy infrastructure tax credits

BILL NUMBER:

SB 1612

INTRODUCED BY: English and 3 Democrats

BRIEF SUMMARY: Adds a new section to HRS chapter 235 to allow taxpayers to claim a credit for code compliant electric vehicle charging infrastructure installed and placed service. The credit shall be 70% of the cost of the electric vehicle charging system or \$500 per electric vehicle charge point of the system, whichever is less. The cost of the electric vehicle charging system includes all costs to acquire, construct, and install the electric vehicle charging system that are required to be capitalized under IRC section 263 to the electric vehicle charging system. Delineates costs that are not part of the electric vehicle charging system that shall not be applicable to the credit. This credit is applicable to electric charging systems placed in service after July 1, 2009 and before January 1, 2016.

Defines "electric vehicle charge point" and "electric vehicle charging system" for purposes of the measure.

Adds a new section to allow a taxpayer to claim a tax credit for any alternative fuel refueling infrastructure for the taxable year it is placed in service. The credit shall be 30% of the cost of the alternative fuel refueling infrastructure or \$10,000, whichever is less. The cost of the alternative fuel refueling infrastructure includes all costs to acquire, construct and install the alternative refueling infrastructure that are required to be capitalized under IRC section 263 to the alternative fuel infrastructure. Delineates costs that are not part of the electric vehicle charging system that shall not be applicable to the credit.

Defines "alternative fuel refueling infrastructure" for purposes of the measure.

If a deduction is taken under IRC section 179, then no tax credit shall be allowed for that portion of the cost for which the deduction is taken. The basis of eligible property for depreciation or accelerated cost recovery system purposes for state income taxes shall be reduced by the amount of credit allowable and claimed, or in the alternative, the taxpayer shall treat the amount of the credit allowable and claimed as a taxable income item for the taxable year in which it is properly recognized under the method of accounting used to compute taxable income. Prohibits the costs used to compute this credit to be used to compute any other tax credit. Recapture provisions shall conform to the recapture provisions applied to "alternative fuel refueling property" credits described in IRC section 30C. This credit is applicable to alternative fuel refueling infrastructure placed in service after July 1, 2009 and before January 1, 2016.

Credits in excess of a taxpayer's income tax liability shall be applied to subsequent tax liability until exhausted. Claims for the credit, including any amended claims, must be filed on or before the end of the twelfth month following the close of the taxable year. The director of taxation may adopt rules pursuant

SB 1612 - Continued

to HRS chapter 91 and prepare the necessary forms to claim the credit and may require proof of the claim for the credit. Claims for the credit shall be on forms provided by the department of taxation.

Adds a new section to HRS chapter 237 to exempt from general excise taxation, the gross proceeds arising from the sale or lease of a new or used light duty motor vehicle that is classified as an alternative fuel vehicle or fuel economy leader vehicle from January 1, 2010 and expiring on December 31, 2015. Define "alternative fuel," "alternative fuel vehicle," "fuel economy leader vehicle" and "light duty motor vehicle" for purposes of the measure.

Amends HRS section 235-110.3 to rename the ethanol facility tax credit the biofuel facility tax credit and change references to ethanol to biofuel. The taxpayer may claim this credit for the first 15 million gallons of capacity of each qualifying biofuel facility.

Defines "biofuel" as ethanol, biodiesel, diesel, jet fuel, or other liquid fuel meeting the relevant fuel specifications of ASTM International.

Deletes the provision disallowing the credit if the nameplate capacity reaches 40 million gallons per year.

Amends HRS section 238-9.5 to provide that the use tax shall not be imposed on an alternative vehicle or fuel economy leader vehicle that is exempt from the general excise tax.

Amends HRS section 251-2 to provide that between January 1, 2010 and ending December 31, 2015, up to 200 motor vehicles per rental car fleet shall be exempt from the rental motor vehicle surcharge tax. Defines "alternative fuel," "alternative fuel vehicle," "light duty motor vehicle" and "rental car fleet" for purposes of the measure.

Makes other nontax amendments relating to the use of alternative fuel vehicles in the state and related infrastructure.

EFFECTIVE DATE: July 1, 2009

STAFF COMMENTS: This measure proposes an income tax credit for: (1) electric vehicle charging infrastructure; and (2) alternative fuel refueling infrastructure. While it appears that these credits are proposed to encourage the development of this infrastructure, it is questionable whether a tax credit is necessary to entice such development. While the trend is to move toward non-fossil fuel vehicles, such as electric vehicles and non-gasoline vehicles, such infrastructure would become necessary to recharge and refuel these vehicles, so such development will occur regardless of the credit. It should also be noted that while the proposed credits are substantial at 70% of the cost of electric vehicle charging infrastructure or up to \$10,000 in the case of an alternative fuel refueling infrastructure, the credits amount to nothing more than a partial subsidy for the development of this infrastructure in the state.

In addition, the proposed tax incentives measure would result in fewer tax dollars that the state sorely needs at this point. On the other hand, perhaps all proposals suggesting tax expenditures, such as this proposal forwards, should be accompanied with a recommendation for an equal reduction in state spending to compensate for the lost revenues.

Because the proposed incentives are nothing more than a subsidy of these vehicles or charging stations,

SB 1612 - Continued

the cost of the credit steals from funds that could have been used for many other worthy programs. Such proposals reflect a lack of understanding of the gravity of the fiscal situation that the state is facing.

Again, it should be noted that the tax system is not meant to be a mechanism by which to hand out refunds and rebates to influence human behavior.

If the intent is to subsidize such vehicles, albeit in the name of energy conservation and environmental concern, then lawmakers should just appropriate the necessary sum of taxpayer dollars and let the taxpayers decide whether or not that was a good way to spend tax dollars. As an appropriation from the state general fund, taxpayers can then decide whether the appropriation was worth the reduction in spending on education, or welfare, or health. Using the backdoor of tax credits hides the fact from taxpayers that tax dollars are being spent at the expense of critical public programs.

The legislature by Act 289, SLH 2000, enacted an ethanol investment tax credit to encourage the production of ethanol in the state. The legislature by Act 140, SLH 2004, further clarified the criteria and delineated qualifying costs to claim the credit. The proposed measure proposes a tax credit for the conversion of fuel storage terminals for the importation, storage, and blending of ethanol with gasoline. While it appears that this measure is renaming the ethanol facility tax credit to a biofuel facility tax credit, biofuel should be defined to clarify and ensure that ethanol is a biofuel. Apparently the taxpayer who had originally proposed building an ethanol plant which spawned the current ethanol tax credit has advised lawmakers that the production of fuel from algae is more efficient. Thus, the broader term of biofuel seems to be more encompassing. Regardless, this part of the law needs a definition of "biofuel" if that term is now to replace ethanol.

This measure also proposes a general excise and use tax exemption for the sale or lease of light duty motor vehicles that run on alternative fuels or are a fuel economy leader as identified by the EPA. The measure also promotes the use of up to 200 alternative fuel vehicles per rental car fleet that would be exempt from the tour vehicle surcharge tax. It should be noted that the use of the tax system to encourage the purchase and use of these fuel-efficient motor vehicles through influencing human behavior is inefficient. More importantly, the enactment of this measure would send a message to the public that government is attempting to influence/interfere with the purchase of certain kinds and types of motor vehicles. One has to remember that when gas prices surged to new heights last year, sales of large vehicles and SUVs plummeted and there was a demand for fuel efficient vehicles.

Digested 2/11/09

Testimony before the Senate Committee on Energy and Environment and Transportation, International and Intergovernmental Affairs

S.B. 1612, Relating to Transportation Energy

Thursday, February 12, 2009 2:50 p.m., Conference Room 225

By Carlos Perez Loriga
Director
Customer Technology Applications Division
Hawaiian Electric Company, Inc.

Chairs Gabbard & English and members of the Committee:

My name is Carlos Perez Loriga and I am testifying on behalf of Hawaiian Electric Company, Inc., and its subsidiary utilities, Maui Electric Company, Ltd., and Hawaii Electric Light Company, Inc.

S. B. 1612 creates incentives to enable electrification of transportation in Hawaii and replacement of fossil fuel vehicles with electric and alternative fuel vehicles.

While sensitive of the financial challenges that the State is currently facing, Hawaiian Electric Company supports S.B. 1612, to promote the increased acceptance and use of electric and plug-in hybrid electric automobiles. Increased consumer acceptance of these types of vehicles will aid in the reduction of greenhouse emissions and fossil fuel use and will also help enable the Hawaii Clean Energy Initiative's goal of 70% clean, renewable energy by 2030.

HECO would also like to propose the following amendments (**in bold**) for your consideration that can help biofuel development in Hawaii:

1. Pages 25 lines 21-22 and page 26, lines 1-2 — "<u>Biofuel</u>" means fuel from non-petroleum plant or animal based sources, such as, but not limited to, ethanol, biodiesel, diesel, jet fuel, or other liquid fuel crude, processed or refined meeting the relevant fuel specifications of ASTM International (formerly ASTM, the

GOODSILL ANDERSON QUINN & STIFEL

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MEMORANDUM

TO:

Senator Mike Gabbard

Chair, Committee on Energy & Environment

Senator J. Kalani English

Chair, Committee on Transportation, International & Intergovernmental

Affairs

Via e-mail: ENETestimony@Capitol.hawaii.gov

FROM:

Anne Horiuchi

DATE:

February 11, 2009

RE:

S.B. 1612 relating to Transportation Energy

Hearing on Thursday, February 12, 2009 at 2:50 p.m., Room 225

Dear Chairs Gabbard and English, and Members of the Joint Committees:

I am Anne Horiuchi, testifying on behalf of the Alliance of Automobile Manufacturers ("Alliance"). The Alliance opposes S.B. 1612, which will establish a comprehensive approach to increasing the use of alternative fuel vehicles in Hawaii, including state procurement of alternative fuel vehicles, tax incentives and infrastructure requirements.

The Alliance is a trade association representing eleven car and light truck manufacturers, including: BMW, Chrysler, Ford, GM, Jaguar Land Rover, Mazda, Mitsubishi, Mercedes-Benz, Porsche, Toyota, and Volkswagen.

First, the Alliance notes that the incentives for the purchase of vehicles that are classified as alternative fuel vehicles or fuel economy leader vehicles will have a positive impact on the environment. For that reason, the Alliance supports the intent of that feature of S.B. 1612.

However, the Alliance opposes S.B. 1612 to the extent that it imposes sales requirements upon private fleets and motor vehicle dealers, and it imposes penalties for failure to meet those requirements. The penalty provisions are particularly inappropriate, as it is difficult to predict the type of vehicles that will be available five or ten years from

February 11, 2009 Page 2

now. Nor does it seem possible to predict whether consumers will purchase alternative fuel vehicles in such amounts that the car dealers will be able to comply with S.B. 1612's requirements.

For these reasons, the Alliance opposes these provisions in S.B. 1612 and respectfully requests that it be held in committee. Thank you very much for the opportunity to testify on this measure.

From: Sent: Dave Rolf [drolf@hawaiidealer.com] Wednesday, February 11, 2009 3:13 PM

To: Subject: ENETestimony
HADA testimony in OPPOSITION to portions of SB 1612

February 11, 2009

Testimony in OPPOSITION to portions of SB 1612
Relating to Transportation Energy
Presented to the Senate Committee on Energy and Environmental Protection

At the hearing 2:50 p.m., Thursday, February 12, 2009 in Conference Room 225, Hawaii State Capitol

Submitted by David H. Rolf, for the Hawaii Automobile Dealers Association Hawaii's Franchised New Car Dealers

Chair Gabbard members of the committee,

Our strong opposition to this bill is based on many reasons, but the underlying reason is the following (which bears repeating):

The Hawaii economy, largely a consumer-based economy, is reeling.

- 1) car sales are off 50% from highs
- 2) home sales are off 50%
- 3) in some sectors, future incentive travel to Hawaii is off 50%

Those 50% declines are in major components of our primary economic drivers:

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We can't afford a failure now to prioritize our efforts to help this economy recover.

Energy efficiencies and alternative fuels are the keys to a bright economic future for Hawaii and the nation, but any time devoted to any market-disruptive solutions, right now, takes us away from the clearly-defined larger economic problems facing this state and this nation and the workable solutions to alternative fuels that are being brought forward.

This market-disruptive legislation, SB 1612 calls for \$1,000-per-car penalties on dealers who do not meet an undisclosed percentage of alternative fuel vehicles in 2015.

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HADA joins policymakers in wanting to reduce our nation's dependence on foreign oil and accelerate the introduction of fuel-efficient technologies in Hawaii.

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H.R. 6, the Energy Independence and Security Act of 2007 (the Energy Bill), signed into law in December of 2007, included at its centerpiece an unprecedented increase in the Corporate Average Fuel Economy (CAFE) standards—a dramatic 40 percent increase in fuel economy by 2020. These new national CAFE standard increases provide the opportunity to save 18 billion gallons of gasoline per year in 2020 compared to projected consumption levels. This is the equivalent of removing 30 million cars from the nation's roads.

H.R. 6 commits automakers to reducing CO2 emissions by 30 percent by 2020. This is more than any other sector would be required to achieve in the same timeframe under any of the major climate change bills currently under consideration in Congress. With these reductions, automakers will lead all industries in setting a clear path to meeting the recent United Nations Bali Climate Change Summit's goal of a 50 percent reduction in CO2 emissions by 2050.

This landmark legislation presents one of the biggest challenges in the automobile industry's history and will require automakers to continue creating, developing, and introducing state-of-the-art fuel- efficient vehicles. And automakers are stepping up to the challenge, rolling up their sleeves and moving forward. This year, more than 25 hybrid models are available for purchase. And, according to researchers at JD Power and Associates, sales of clean diesels are expected to triple over the next decade, accounting for more than 10 percent of U.S. vehicle sales by 2015.

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We're doing all we can to facilitate rapid transition. We need viable businesses to help do this.

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So, how do we accomplish rapid transition?

- 1) The HADA board voted unanimously in August of 2007 to support the "fast-tracking" of wind energy permitting in Hawaii—so as to facilitate a transition to the electric car.
- 2) HADA supported the Abercrombie-Peterson bill, with its up to \$7,500 tax credits for electric vehicles --which was part of the national discussion in the Congress leading up to adoption of the Energy Bill (of 2007). The Energy Bill contains credits for:

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- 4) Automakers must be involved. HADA has sent letters to all CEOs of the Detroit Big 3 requesting their electric car models for the upcoming auto show. While our negotiations continue, we shared with these automakers Hawaii's first-state-in-the-nation efforts toward implementing a grid of electric charge spots. We asked for their support.
- 5) HADA proposed a new business model for the Big 3 that involved the electric car, and a revolutionary penny-a-mile proposal. See our HADA expanded comments below:

The penny-a-mile concept and a new business model for the Big 3

In 1934, in the middle of the Great Depression, Pepsi-cola was struggling -- even with its switch to a 12-once bottle. Cocacola, with its 6-once bottle at 10 cents, was still the dominant one in the market. Pepsi, though, soon slashed its price to 5 cents and saw its sales soar through the roof.

Today by using astute public policy we could let consumers drive to work at half price —only 5 cents a mile in eco-friendly electric-powered vehicles, compared to the current 10 cents a mile in today's gas-powered cars. The features of the electric cars would be nearly identical to the gas-powered cars.

The concept requires Congress to create new public policy to be combined with currently available automotive technology and a new business model for the Big 3.

Occam's razor, attributed to a 14th century Franciscan friar, and sometimes called the law of succinctness, is best summed by Einstein who said that "theories should be as simple as possible, but no simpler."

The razor first appeared in Maimonides "The Guide for the Perplexed" and it thus seems to have application to the problems surrounding the Big 3 automakers who need to develop a workable business model against a perplexing backdrop of marketing, finance, and labor situations.

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Half price is something every consumer understands; the "half price per mile driving" idea is indeed succinct.

Enter Shai Agassi, the software engineer from Palo Alto, who brings an audacious plan for switching America to the electric car.

His idea, though, is simple. Americans would buy full-featured electric cars and light trucks from a big list of familiar automakers. And these new plug-in electric vehicles, which some refer to as "the cars without tailpipes," would indeed have the same features of all the current cars and trucks but would operate on common household plug-in electricity.

But before anyone here gets too twitipated about the fact that much electricity in America is produced by oil-burning plants, we should point out that Mr. Agassi proposes that the cars charging overnight from the electric grid operate on "green electrons" like those produced by the big American wind farms envisioned by T. Boone Pickens, or the world-class wind resources on the islands of Lanai, Molokai, and Maui---which can charge vehicle batteries at a lower, off-peak charge at night. And still offer enough profit to Mr. Agassi's company to be worthwhile.

Such vision is shared by Hawaii's governor Linda Lingle who recently announced the Hawaii Clean Energy Initiative includes a bold plan to have 3,000 plug-in electric vehicles on the Hawaii roadways by 2010 and 50,400 electric vehicles by 2015.

The plan for Hawaii and the rest of America, however, would be severely impacted by the loss of American auto manufacturing.

GM already has plans to market the Volt plug-in electric sedan in 2010 and Chrysler has announced plans for 3 plug-in electric vehicles —one of which would launch in 2010. The Volt's 400-mile range includes 40 miles on one battery charge, backed up by a 360-mile range-extender gasoline engine. GM points out that almost 80% of America's car commuters have daily commutes that fall within that 40-mile battery range.

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Agassi will sell "miles" on his battery plan much like cell phone companies sell annual minute-use plans. Better Place will provide a 10,000-mile plan, a 20,000-mile plan, etc. The real benefit for consumers is a dramatically lowered cost of ownership for full-featured electric vehicles, with similar features to the current cars on the road.

With these plug-in electric cars, and the right adjustments to public policy, drivers could be driving at half price, starting in 2010. Like in the Pepsi and Coke story, it would cost consumers only 5 cents per mile to drive a plug-in electric compared to 10 cents per mile to drive a similar gas car. It's a cool idea for cost-conscious drivers, not to mention a cool idea for a cooler planet.

Here's how the drive-at-half-price-per-mile works.

The recent 2008 price of a gallon of gas, in the third quarter, in the U.S. has been roughly \$2.40 / gallon. The current miles per gallon federal Corporate Average Fuel Efficiency (CAFE) standard for vehicles sold in the U.S. is roughly 24 miles per gallon, so the math thus is simple: That's 10 cents per mile. A 40-mile roundtrip commute is \$4.

A 4-hour 17-khw overnight charge with a lowered rate of 12-cents/kwh would be roughly \$2. That charge will propel a Volt electric vehicle around 40 miles. Of course there will be thousands of charge spots in the city, including thousands at workplace sites, and the Volt even has a 360-mile range-extender gasoline engine.

The \$2 a day for your electric commute is half price when compared to \$4 for gas.

And half price is a concept everyone understands.

But it gets better.

Besides the advantage of helping America get off its \$700 billion foreign oil habit, the Penny-a-Mile razor allows a quick replenishing of any federal loans given to the Big 3 automakers.

Here's how that part works. A new business model for the Big 3 would be created. Then the \$25 billion in federal loans to the automakers, made in exchange for automakers' stock—could be paid back multi-fold.

GM stock, for example, recently hit a 60-year low and is now below the 5-dollar range for one share.

Congress could encourage transition to the fuel-less transportation system simply by structuring a tax on foreign oil to allow gas cars to continue to operate at 10 cents a mile on average, while subsidizing "green energy" electricity, allowing plug-in electric vehicles to operate at 5 cents a mile.

The 5 cents compared to 10 cents marketing wizardry already demonstrated ruing the depression by Pepsi shows that consumers will go through the roof for half price.

But the concept gets even better.

As Automakers produce better cars capable of getting 60 miles on a charge--which is roughly 3 cents a mile--Better Place, with its sophistication in software, would provide half of the savings to the customers through lower-cost-per-mile plans. Automakers and auto dealers could each be provided \$500 per car on a 50,000-mile plan. That amount would double at 100,000 miles.

At the high level, automakers and dealers would receive a thousand dollars per vehicle.

Multiply this times half the 16 million new vehicles per year that could be produced for U.S. consumer use by 2015, and automakers would be receiving back \$8 billion a year. Dealers would also receive and split \$8 billion.

It's public policy that would start the automaker stocks bouncing back the moment the new business model and accompanying public policies were announced. Taxpayer dollars invested in the bridge loan stock purchase may be repaid with a multi-fold return.

We all know that the Gillette Safety Razor company made much more money from selling the blades than they ever did from the razors.

A three-fold return would be a \$75 billion pay back on the \$25 billion taxpayer dollars invested in the Big 3 bridge financing requested right now.

Right now consumers can already buy more than 100 transition vehicles—the fuel-efficient 30+ mpg gas cars and the gaselectric hybrid vehicles—which all are value-priced, with easy low-interest financing options, now in dealer showrooms. Since the electric vehicles won't really be plentiful until around seven years from now, these interim fuel-efficient cars provide the way to the future.

The lessons learned from the half price Pepsi and the simple, buy-the-miles idea from Shai Agassi, and an extension of that idea into a penny-a-mile rebate to auto dealers and car manufacturers could lead to excellent public policy decisions, a big retooling of the American auto industry and a rapid transition to electric vehicles and a big return for American taxpayers.

We urge you to explore these and other affirmative consumer incentives rather than implement this punitive bill. We respectfully request that SB1612 be held.

Respectfully submitted, The Hawaii Automobile Dealers Association

David H. Rolf

Hawaii Automobile Dealers Association -- 1100 Alakea St. Suite 2601, Hon. Hi. 96813

Tel: 808 593-0031 Cel: 808 223-6015 Fax: 808 593-0569

David H. Rolf, 1100 Alakea St. Suite 2601, Honolulu, Hawaii 96813 Tel: 808 593-0031



Written Statement of YUKA NAGASHIMA Executive Director & CEO

High Technology Development Corporation before the

SENATE COMMITTEES ON ENERGY AND ENVIRONMENT AND

TRANSPORTATION, INTERNATIONAL AND INTERGOVERNMENTAL AFFAIRS

Thursday, February 12, 2009 2:50 PM State Capitol, Conference Room 225

In consideration of SB 1612 RELATING TO TRANSPORTATION ENERGY.

Chairs Gabbard and English and Members of the Senate Committees on Energy and Environment and Transportation, International and Intergovernmental Affairs.

The High Technology Development Corporation (HTDC) strongly supports SB 1612, which establishes a comprehensive approach to transform the State's transportation energy from petroleum energy sources to alternative fuels. However, we recommend the committee consider a change to Section 14.

Section 14 provides alternative fuel vehicle requirements for fleets and dealers. Under requirements subparagraph (a) for both private fleets and sales, the text "flexible fuel vehicles" should be deleted. Flexible fuel vehicles are configured to allow the use of petroleum-based fuels as well as other fuels generally recognized as alternative fuels. History has shown that owners/operators of flexible fuel vehicles have used petroleum-based fuels in these vehicles due to non-availability of the alternative fuel. Promoting the future purchase of flexible fuel vehicles would facilitate the continuation of prior fuel use practices that do not meet the intent of this section of increasing the percentages of vehicles operating on non-petroleum energy sources.

Thank you for the opportunity to submit this testimony.

SB 1612

RELATING TO TRANSPORTATION ENERGY

JOEL K. MATSUNAGA CHIEF OPERATING OFFICER & EXECUTIVE VP HAWAII BIOENERGY

FEBRUARY 12, 2009

Chair Gabbard and English and Members of the Senate Committees on Energy and Environment and on Transportation, International and Intergovernmental Affairs:

I am Joel Matsunaga, testifying on behalf of Hawaii BioEnergy on SB 1612, "Relating to Transportation Energy".

SUMMARY

Hawaii BioEnergy ("HBE") supports, with amendments, SB 1612 which seeks to establish a comprehensive approach to increasing the use of alternative fuel vehicles and alternative fuels in the State of Hawaii. SB 1612 would revise Chapter 235 of the Hawaii Revised Statutes to incorporate Section 235-B, which provides a tax credit for any alternative fueling refueling infrastructure installed or placed in service in the State up to 30 per cent of the cost of the refueling infrastructure or \$10,000 whichever is less. HBE supports this measure as the credit is a valuable and critical means of facilitating the needed expansion of renewable fuels distribution infrastructure.

SB 1612 also seeks to revise Section 235-110.3 of the Hawaii Revised Statutes to encourage the development of local renewable energy sources by expanding the Ethanol Facility Tax Credit to apply more broadly to biofuels facilities, rather than exclusively to ethanol. HBE supports broadening the scope of the facility tax credit to incorporate biofuels. To that end, the amendments to Section 235-110.3 of SB 1612

proposed below expand the legislation's definition of qualifying biofuel production and qualifying production methods to incorporate additional bioconversion methods that are suitable for and could be applied to Hawaii-based biofuel production. Further, the proposed amendments recognize the importance of using locally grown feedstocks in the biofuel production process and would help to direct the benefits of that production to local Hawaiians.

Further, SB1612 seeks to amend Section 103D-1012 of the Hawaii Revised Statutes to apply to biomass-based diesel, rather than biodiesel. HBE supports the inclusion of biomass-based diesel and proposes amendments outlined below to further clarify the definitions of both biomass-based diesel and biofuel.

HAWAII BENEFITS FROM RENEWABLE ENERGY PROJECTS THAT UTILIZE LOCAL FEEDSTOCKS

Hawaii BioEnergy is a local company with a mission to help Hawaii toward a sustainable energy future through the production of biofuels from locally grown feedstocks. Among its partners are three of the larger land owners in Hawaii who control in total over 430,000 acres of land. HBE and its partners would like to use significant portions of their land to address Hawaii's energy needs. Since its inception in 2006, HBE has been researching various biofuels alternatives to clearly evaluate each biofuel's relative suitability and sustainability based on Hawaii's natural resource base, climate, market and infrastructure.

One of those biofuel alternatives which HBE is pursuing is the production of jet fuel and other oil derivatives from micro-algae. Preparations have been underway for many months and facilities to conduct on-site research and development are expected to be in place before this legislative session is done. Algae not only offers Hawaii the benefit of developing a locally produced fuel source, but it also benefits the agriculture industry by providing proteins for animal feed, fertilizers and other locally produced products.

HBE is also currently considering plans to develop locally produced ethanol from sugar cane, sweet sorghum, or other crops that can be fermented into ethanol. The production of ethanol in Hawaii will provide its residents with greater energy security, create a significant number of jobs, reduce the burning of fossil fuels, and retain dollars in the State's economy rather than sending them overseas.

SB 1612 REQUIRES AMENDMENT TO FULLY BENEFIT HAWAII

While local biofuel production would benefit the State, the gains would be compounded if the feedstocks used to produce the biofuels are grown locally – as the increased demand for local inputs would create more jobs, boost demand from local businesses, and generate additional tax revenue for the State. As indicated by the independent study commissioned by HBE, a biofuel operation using locally grown feedstocks could significantly benefit Hawaii by contributing to economic growth, generating tax revenue, and improving energy price stability and energy security at both the county and State levels. HBE is committed to sustainable production and harvesting of all locally produced feedstocks used for biofuel production.

In order for the State to realize the full benefits of Section 235-110.3, HBE recommends that SB 1612 be amended as shown below to recognize the importance of sustainably and locally produced feedstocks to the State of Hawaii.

With respect to the definition of qualifying biofuel production:

"Qualifying [ethanol] biofuel production" means [ethanol] biofuel produced from renewable, organic feedstocks, or waste materials, including municipal solid waste. All qualifying production shall be fermented, distilled, gasified, or produced by anaerobic digestion, transesterification, extraction following the growth and production of biomass, thermochemical, biochemical, or physical chemical conversion methods such as reformation and catalytic conversion and dehydrated at the facility."

With respect to the definition of qualifying biofuel production facility:

"Qualifying [ethanol] biofuel production facility" or

"facility" means a facility located in Hawaii [which] that

produces [motor] fuel grade [ethanol meeting the minimum

specifications by the American Society of Testing and Haterials

standard D ~806, as amended.] biofuel and shall utilize locally grown feedstocks

for at least seventy-five per cent of its production output."

With respect to Biofuel Preference, HBE proposes that Section 103D-1012 be amended to eliminate the definition of biodiesel contained in Subsection (d) given the incorporation of biomass-based diesel:

"(d) As used in this section, "biodiesel" means a vegetable oil-based fuel that meets ASTM International standard D6751, "Standard Specification for Biodiesel (B100) Fuel Blend Stock

for Distillate Fuels", as amended."

With respect to the definition of biofuel in Section 103D-1012, HBE proposes Subsection (e) be amended to expand and clarify the definition of biofuel to also apply to algae-based fuel:

"(e) As used in this section, "biofuel" means fuel from "non-petroleum plant, or animal, or biomass-based sources that can be used for the generation of heat or power."

Without the amendments proposed above, the State would not fully realize the benefits from the development of biofuel facilities in Hawaii.

CONCLUSION

HBE is moving forward with projects that will help to secure Hawaii's energy future and generate economic gains for the state. Hawaii residents will benefit from:

- Greater energy security from the displacement of fuel imports;
- A cleaner environment from the expansion of sustainable agriculture, the sequestration of CO2 and harmful green house gas emissions, and reduction of fossil fuel consumption;
- A stronger economy through local fuel production, job creation, wealth, and tax generation.

HBE believes that SB1612, with the proposed amendments, will encourage the development of renewable energy sources in Hawaii.

Thank you for the opportunity to testify.



LIFE OF THE LAND

76 North King Street, Suite 203 Honolulu, Hawai'i 96817

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COMMITTEE ON ENERGY AND ENVIRONMENT Senator Mike Gabbard, Chair Senator J. Kalani English, Vice Chair

COMMITTEE ON TRANSPORTATION, INTERNATIONAL AND INTERGOVERNMENTAL AFFAIRS
Senator J. Kalani English, Chair

Thursday, February 12, 2009 2:50 p.m.
Conference Room 225

Senator Mike Gabbard, Vice Chair

SB 1612 RELATING TO TRANSPORTATION ENERGY. PROPOSED AMENDMENT

Establishes a comprehensive approach to increasing the use of alternative fuel vehicles in the State, including state procurement of alternative fuel vehicles, tax incentives, and infrastructure requirements

My name is Henry Curtis and I am the Executive Director of Life of the Land, Hawai'i's own energy, environmental and community action group advocating for the people and 'aina for almost four decades. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

Proposed Amendment:

SECTION 8. "Alternative fuel" means <u>Sustainability Fuels including</u> alcohol fuels, mixtures containing eighty-five per cent or more by volume of alcohols with gasoline or other fuels, natural gas, liquefied petroleum gas, hydrogen, biodiesel, mixtures containing twenty per cent or more by volume of biodiesel with diesel or other fuels, other fuels derived from biological materials, and electricity provided by off-board energy sources.

Sustainability Fuels are fuels that are not (1) derived from coal; or (2) grown on former rainforests destroyed in the last 10 years; or (3) grown on land in which native peoples were displaced in the last 10 years

SECTION 10. "Biofuel" means <u>Sustainability Fuels including</u> ethanol, biodiesel, diesel, jet fuel, or other liquid fuel meeting the relevant fuel specifications of ASTM International (formerly ASTM, the American Society for Testing and Materials).

Sustainability Fuels are fuels that are not (1) derived from coal; or (2) grown on former rainforests destroyed in the last 10 years; or (3) grown on land in which native peoples were displaced in the last 10 years

Mahalo.

Henry Curtis

February 11, 2009

Testimony in OPPOSITION to portions of SB 1612
Relating to Transportation Energy
Presented to the Senate Committee on Energy and Environmental Protection

At the hearing 2:50 p.m., Thursday, February 12, 2009 in Conference Room 225, Hawaii State Capitol

Submitted by David H. Rolf, for the Hawaii Automobile Dealers Association Hawaii's Franchised New Car Dealers

Chair Gabbard members of the committee,

Our strong opposition to this bill is based on many reasons, but the underlying reason is the following (which bears repeating):

The Hawaii economy, largely a consumer-based economy, is reeling.

- 1) car sales are off 50% from highs
- 2) home sales are off 50%
- 3) in some sectors, future incentive travel to Hawaii is off 50%

Those 50% declines are in major components of our primary economic drivers:

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We can't afford a failure now to prioritize our efforts to help this economy recover.

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Nissan is already about to launch, a series of plug-in electric vehicles, with 120-mile battery ranges, for the streets of Tel Aviv and Copenhagen. And here's where Agassi comes in. Consumers in those cities don't need to purchase the expensive \$11,000 lithium-ion batteries because Agassi's company, Better Place, will install hundreds of thousands of 110-volt "charging spots" in the cities and provide the current cities service station networks with "switch-out" batteries in case drivers need them during the course of extended trips.

Agassi will sell "miles" on his battery plan much like cell phone companies sell annual minute-use plans. Better Place will provide a 10,000-mile plan, a 20,000-mile plan, etc. The real benefit for consumers is a dramatically lowered cost of ownership for full-featured electric vehicles, with similar features to the current cars on the road.

With these plug-in electric cars, and the right adjustments to public policy, drivers could be driving at half price, starting in 2010. Like in the Pepsi and Coke story, it would cost consumers only 5 cents per mile to drive a plug-in electric compared to 10 cents per mile to drive a similar gas car. It's a cool idea for cost-conscious drivers, not to mention a cool idea for a cooler planet.

Here's how the drive-at-half-price-per-mile works.

The recent 2008 price of a gallon of gas, in the third quarter, in the U.S. has been roughly \$2.40 / gallon. The current miles per gallon federal Corporate Average Fuel Efficiency (CAFE) standard for vehicles sold in the U.S. is roughly 24 miles per gallon, so the math thus is simple: That's 10 cents per mile. A 40-mile roundtrip commute is \$4.

A 4-hour 17-khw overnight charge with a lowered rate of 12-cents/kwh would be roughly \$2.

That charge will propel a Volt electric vehicle around 40 miles. Of course there will be thousands of charge spots in the city, including thousands at workplace sites, and the Volt even has a 360-mile range-extender gasoline engine.

The \$2 a day for your electric commute is half price when compared to \$4 for gas.

And half price is a concept everyone understands.

But it gets better.

Besides the advantage of helping America get off its \$700 billion foreign oil habit, the Penny-a-Mile razor allows a quick replenishing of any federal loans given to the Big 3 automakers.

Here's how that part works. A new business model for the Big 3 would be created. Then the \$25 billion in federal loans to the automakers, made in exchange for automakers' stock—could be paid back multi-fold.

GM stock, for example, recently hit a 60-year low and is now below the 5-dollar range for one share.

Congress could encourage transition to the fuel-less transportation system simply by structuring a tax on foreign oil to allow gas cars to continue to operate at 10 cents a mile on average, while subsidizing "green energy" electricity, allowing plug-in electric vehicles to operate at 5 cents a mile.

The 5 cents compared to 10 cents marketing wizardry already demonstrated ruing the depression by Pepsi shows that consumers will go through the roof for half price.

But the concept gets even better.

As Automakers produce better cars capable of getting 60 miles on a charge--which is roughly 3 cents a mile--Better Place, with its sophistication in software, would provide half of the savings to the customers through lower-cost-per-mile plans. Automakers and auto dealers could each be provided \$500 per car on a 50,000-mile plan. That amount would double at 100,000 miles.

At the high level, automakers and dealers would receive a thousand dollars per vehicle.

Multiply this times half the 16 million new vehicles per year that could be produced for U.S. consumer use by 2015, and automakers would be receiving back \$8 billion a year. Dealers would also receive and split \$8 billion.

It's public policy that would start the automaker stocks bouncing back the moment the new business model and accompanying public policies were announced. Taxpayer dollars invested in the bridge loan stock purchase may be repaid with a multi-fold return.

We all know that the Gillette Safety Razor company made much more money from selling the blades than they ever did from the razors.

A three-fold return would be a \$75 billion pay back on the \$25 billion taxpayer dollars invested in the Big 3 bridge financing requested right now.

Right now consumers can already buy more than 100 transition vehicles—the fuel-efficient 30+ mpg gas cars and the gas-electric hybrid vehicles—which all are value-priced, with easy low-

interest financing options, now in dealer showrooms. Since the electric vehicles won't really be plentiful until around seven years from now, these interim fuel-efficient cars provide the way to the future.

The lessons learned from the half price Pepsi and the simple, buy-the-miles idea from Shai Agassi, and an extension of that idea into a penny-a-mile rebate to auto dealers and car manufacturers could lead to excellent public policy decisions, a big retooling of the American auto industry and a rapid transition to electric vehicles and a big return for American taxpayers.

We urge you to explore these and other affirmative consumer incentives rather than implement this punitive bill. We respectfully request that SB1612 be held.

Respectfully submitted,

The Hawaii Automobile Dealers Association

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SENATE COMMITTEE ON ENERGY & ENVIRONMENT SENATE COMMITTEE ON TRANSPORTATION, INTERNATIONAL AND INTERGOVERNMENTAL AFFAIRS

February 12, 2008, 2:50 P.M.

(Testimony is 2 pages long)

TESTIMONY IN SUPPORT OF SB 1612

Chair Gabbard, Chair English, and members of the Committees:

The Sierra Club, Hawai'i Chapter, with 5500 dues paying members statewide, supports SB 1612, encouraging the development of electric and alternative fuel cars in Hawai'i.

New Zealand -- a comparable location to Hawai`i -- currently produces over 60% of their electrical power needs from renewable sources. The key element to this "greenness" is storage capacity. Successful electrical grids must be able to tap a source of energy when wind and solar power wanes.

Electric vehicles, which are idle an average of 22 hours a day, are an ideal storage option. For example, the eBox (a 100% electric conversion of a Toyota Scion xB) can drive 140-180 miles or power twenty average homes for one hour. Vehicle-to-grid technology allows car owners to use the power stored in the batteries to reduce their power consumption, store solar-generated power for clean driving, or back up the power grid.

Electrical cars have other benefits. They are silent, create no air pollution, and need little maintenance. No tune ups, oil changes, or radiator repairs are necessary (these items don't exist on an electrical car). Most importantly, they reduce Hawai'i's fossil fuel consumption, which is currently the most dependent state on oil in the nation.

¹ "How Near are Vehicle-to-Grid Electric Cars?" by Leonard J. Beck, available at http://evworld.com/article.cfm?storyid=1633

Moreover, the limited geography of Hawai`i makes it an ideal location for electric vehicles. Most commutes are well within an electric vehicles capacity, thus eliminating the need for a gas powered engine (as is included in a hybrid vehicle), reducing Hawaii's fossil-fuel consumption.

Other places have adopted similar measures as proposed in SB 1612. Last November, Oregon became the first state to develop standards for a statewide infrastructure of electric-car plug-in stations in terms of performance, safety, and voltage. If Hawai`i does not act now, it is possible it will lose the investors who want to develop Hawai`i as a pilot project to demonstrate the feasibility of this technology to the rest of the world.

Thank you for the opportunity to testify.





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SENATE COMMITTEE ON ENERGY & ENVIRONMENT SENATE COMMITTEE ON TRANSPORTATION, INTERNATIONAL AND INTERGOVERNMENTAL AFFAIRS

February 12, 2008, 2:50 P.M. Room 225

(Testimony is 2 pages long)

TESTIMONY IN STRONG SUPPORT OF SB 1612

Chairs Gabbard and English and members of the committees:

The Blue Planet Foundation strongly supports Senate Bill 1612, implementing comprehensive clean energy transportation policies that will accelerate electric vehicle (EV) and alternative vehicle use in Hawai'i. We will comment on particular sections of this measure.

SECTION 1. Blue Planet supports requiring that all new homes come equipped with vehicle charging capability by 2015.

SECTIONS 2, 7-8. Proper incentives and requirements for electric vehicle infrastructure will foster rapid development of Hawaii's clean transportation future. Electric vehicles will play an integral role in Hawaii's clean energy future. By using stored electrical energy, EVs can take advantage of intermittent solar, wind, and other clean energy resources. Most vehicles sit idle 22+ hours of the day, so they become *de facto* energy storage devices if their batteries are plugged into the grid when they are not in use. With smart grid infrastructure in place, EVs become an essential component to electricity load and clean energy resource balancing—in addition to providing clean mobility solutions for Hawai'i residents.

Electric vehicles today have evolved from their "golf cart" roots. In fact, one new production model, the Tesla Roadster, is a high-end sports car that can accelerate from zero to 60 miles per hour in under four seconds—beating almost all regular internal combustion engines on the road today. The drawback, however, is its price. As with most full performance EVs, the battery technology currently adds considerable expense to the cost of the EV. Tax incentives for EV purchase will help to overcome this barrier, and some EV companies are considering business models that will reduce the upfront cost of EVs for Hawai'i residents.

In addition to tax credits for EV charging infrastructure, Blue Planet supports the creation of preferential electricity rates to encourage EV charging off-peak with electricity from clean energy sources. Such a policy would support three clean energy goals: encouraging EV use, increasing clean energy consumption, and leveling out the electricity demand on the grid. We are happy to work with the committee to craft such a preferential charging rate policy.

Blue Planet also supports amending Section 2 of SB 1612 with a schedule of steadily increasing parking stall EV charging capacity requirements over time. This would prepare building owners and managers for the upcoming requirements and help their EV investment decision making. Such a policy would also help to overcome the "chicken and the egg" problem of customer EV adoption; if residents know that infrastructure is coming, they will feel more comfortable about investing in a vehicle.

SECTIONS 4 - 6. Blue Planet supports the creation of a transportation energy transformation grant fund to support the purchase of electric vehicles. We believe that funding for this fund should not come from the general fund but should be funded through an increased fee on each barrel of oil imported into Hawai'i. By tapping into the source of our dependency problem—imported oil—we can help to fund the transformation to a smart energy future. A surcharge on each barrel of oil would make the "polluter pay." Proper exceptions should be made to reduce the regressive nature of such a fee, but over time everyone benefits. As we dramatically expand our clean energy capacity in Hawai'i, the real economic benefits of this carbon surcharge will far outweigh the additional burden it may present. This common sense policy would foster greater energy independence by tapping into the source of our problem to fund our preferred future.

SECTION 10. We support these changes to expand the incentives beyond ethanol. We do want to be sure, however, that we reward only clean, indigenous, renewable sources of fuel.

SECTION 14. We strongly support the transformation of vehicle fleets over a certain size to more energy efficient, alternative fueled, or electric vehicles. The economies of scale for such purchases should drive down the price for the fleet operator as well as residents.

SECTION 15. Blue Planet supports requirements that state agencies lead by example and use electric or alternative fueled vehicles. We particularly support efforts to require the state to purchase high efficiency vehicles and particularly support using life-cycle costing to determine the best transportation options for state vehicles.

Thank you for the opportunity to testify.